

Application No.: 10/815,889
Attorney Ref.: 100101-000300US
Client Ref.: 379829

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for allocating a recommended route in a digital network, the method comprising:
 - using a network planning tool prior to a time of operation of the digital network to define a plurality of recommended routes;
 - generating a list of the recommended routes prior to the time of operation;
 - determining when a route change is needed at the time of operation of the digital network;
 - sending the list of recommended routes to a network device in the digital network;
 - selecting by the network device, one of the recommended routes; and
 - allocating the selected recommended route at the time of operation of the digital network
 - monitoring, by the network device, performance of the list of recommended routes at the time of operation of the digital network.
2. (Cancelled)
3. (Currently Amended) The method of claim 1, wherein a plurality of the performance of the list of recommended routes is defined measured by a hit ratio.
4. (Currently Amended) The method of claim 3, further comprising:
 - defining a priority order of the plurality of recommended routes; and
 - allocating the plurality of recommended routes at least in part according to the priority order.

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5. (Currently Amended) The method of claim 1, wherein a definition of ~~the-a~~ given recommended route includes one or more of the following: source node, destination node, service type, service granularity, maximum delay, protection type.

6. (Currently Amended) The method of claim 5, wherein a definition of ~~the-a~~ given recommended route includes routing information.

7. (Original) The method of claim 6, wherein the routing information includes equipment needs.

8. (Original) The method of claim 7, wherein the routing information indicates whether a route uses a switching matrix.

9. (Currently Amended) The method of claim 1, further comprising:
~~sending the definition of a recommended route to a network management system generating an alternative list of recommended routes if the performance of the list of recommended routes is determined to be inefficient at the time of operation of the digital network; and~~
switching to the alternative list of recommended routes.

10. (Currently Amended) The method of claim 1,~~further comprising sending the definition of a recommended route to an Element Management System wherein the list of recommended routes is generated prior to a time of operation of the digital network.~~

11. (Currently Amended) The method of claim 1, further comprising _____
_____ sending ~~the-a~~ definition of a recommended route to a Craft Terminal.

12. (Currently Amended) The method of claim 1, further comprising _____
_____ sending ~~the-a~~ definition of a recommended route to a control plane.

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13. (Currently Amended) The method of claim 1, wherein the a given recommend route includes a description of a characteristic of an optical network.

14. (Currently Amended) The method of claim 1, further comprising:
receiving information generated at a time of deployment of the digital network;
and

using the received information to modify the a definition of a recommended route.

15. (Currently Amended) The method of claim 1, further comprising:
receiving information generated at a time of operation of the digital network; and
using the received information to modify the a definition of a recommended route.

16-20. (Cancelled)

21. (Currently Amended) An apparatus for allocating a recommended route in a digital network, the apparatus comprising:

a processor;

a computer-readable storage medium including instructions executable by the processor comprising:

~~one or more instructions for using a network planning tool prior to a time of operation of the digital network to define a plurality of recommended routes;~~

one or more instructions for generating a list of the recommended routes ~~prior to the time of operation;~~

~~one or more instructions for determining when a route change is needed at the time of operation of the digital network;~~

~~one or more instructions for sending the list of recommended routes to a network device in the digital network;~~

one or more instructions for selecting, by the network device, one of the recommended routes; and

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~~one or more instructions for allocating the selected recommended route at the time of operation of the digital network~~

~~one or more instructions for monitoring, by the network device, performance of the list of recommended routes at the time of operation of the digital network.~~

22. (Currently Amended) A computer-readable storage medium including instructions executable by a processor, for allocating a recommended route in a digital network, the computer-readable storage medium including instructions which, when executed by a processor, cause the processor to perform the following:

~~using a network planning tool prior to a time of operation of the digital network to define a plurality of recommended routes;~~

~~generating a list of the recommended routes prior to the time of operation; determining when a route change is needed at the time of operation of the digital network;~~

~~sending the list of recommended routes to a network device in the digital network; selecting, by the network device, one of the recommended routes; and allocating the selected recommended route at the time of operation of the digital network~~

~~monitoring, by the network device, performance of the list of recommended routes at the time of operation of the digital network.~~

23. (Cancelled)

24. (Currently Amended) An apparatus for allocating a recommended route in a digital network, the apparatus comprising:

~~means for using a network planning tool prior to a time of operation of the digital network to define a plurality of recommended routes;~~

~~means for generating a list of the recommended routes prior to the time of operation;~~

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means for determining when a route change is needed at the time of operation of the digital network;

means for sending the list of recommended routes to a network device in the digital network;

means for selecting, by the network device, one of the recommended routes; and

means for allocating the selected recommended route at the time of operation of the digital network

means for monitoring, by the network device, performance of the list of recommended routes at the time of operation of the digital network.

25. (Cancelled)

26. (Currently Amended) The ~~apparatus~~ method of claim 241, wherein a at least one recommended route of the plurality of recommended routes is defined configured for maximum volume rather than shortest path.

27. (Currently Amended) The apparatus of claim 26, further comprising:
means for defining a priority order of the plurality of recommended routes; and
means for allocating the plurality of recommended routes at least in part according to the priority order.

28. (New) The method of claim 1, further comprising determining where regeneration of a signal along an optical path in the selected recommended route is required.